

## CLAIMS:

1. Method of simplifying distribution of a processed media signal comprising the steps of:
  - (a) determining at least one set of signal dependent properties of a media signal (x),
  - 5 (b) embedding signal dependent properties in the media signal, and
  - (c) storing the thus modified media signal (x'), such that the signal dependent properties can be extracted and used for processing the media signal when the media signal is to be distributed.
- 10 2. Method according to claim 1, wherein one set of signal dependent properties (a) is to be used for simplifying the compression of the media signal according to a first compression scheme.
- 15 3. Method according to claim 2, wherein the step of determining comprises determining another set of signal dependent properties of the media signal that can be used for simplifying the compression of the media signal according to a second compression scheme and the step of embedding comprises embedding said other set of signal dependent properties in the media signal.
- 20 4. Method according to claim 1, wherein one set of signal dependent properties is chosen from a group comprising: perceptual properties, masking thresholds, quantization levels, scale factors and run-levels.
- 25 5. Method according to claim 1, wherein one set of signal dependent properties (w) is to be used for simplifying watermarking the media signal.
6. Method according to claim 1, in which the step of embedding the set of signal dependent properties is done using a reversible watermarking technique, where the output

signal from the embedding ( $x'$ ) has the same format as the input signal ( $x$ ) for the embedding, and where the original signal ( $x$ ) can be reconstructed in an at least close to bit-exact manner.

7. Method according to claim 1, wherein the embedding is non-reversible.
- 5 8. Method according to claim 7, wherein the embedding is done in a buried data channel.
9. Method according to claim 1, further comprising the steps of:
- 10 (d) retrieving the modified media signal,
- (e) extracting at least one set of signal dependent properties from the modified media signal,
- (f) processing said media signal using said set of signal dependent properties, and
- (g) providing the thus processed media signal for at least one recipient.
- 15 10. Method according to claim 9, wherein, the original media signal is restored in an at least close to bit-exact manner before processing.
11. Method according to claim 9, wherein the steps of determining, embedding
- 20 and storing are performed before a request for delivery of the media signal is received and the steps of retrieving, extracting, processing and providing are performed at the time of receiving a request for delivery of the media signal.
12. Method of distributing a processed media signal comprising the steps of:
- 25 (d) retrieving a modified media signal ( $x'$ ), which has been obtained by embedding at least one set of signal dependent properties related to the media signal in the media signal ( $x$ ),
- (e) extracting at least one set of signal dependent properties from the modified media signal,
- 30 (f) processing said media signal using said set of signal dependent properties, and
- (g) providing the thus processed media signal for at least one recipient.
13. Device (10) for simplifying distribution of a processed media signal comprising:

at least one properties determining unit (12 or 14) for determining a set of signal dependent properties (a or w) of a media signal (x),

an embedding unit (16 or 56) for embedding signal dependent properties in the media signal in order to provide a modified media signal (x'), and

5 a storing unit (18) for storing the thus modified media signal (x'), such that the signal dependent properties can be extracted from the modified media signal for later use in processing the media signal when the media signal is to be distributed.

14. Device according to claim 13, wherein one properties determining unit (14) is  
10 arranged to determine a set of signal dependent properties (a) to be used for simplifying the compression of the media signal according to a first compression scheme.

15. Device according to claim 14, wherein one properties determining unit is  
15 arranged to determine another set of signal dependent properties of the media signal that can be used for simplifying the compression of the media signal according to a second compression scheme and the embedding unit (24) is arranged to embed also these other signal dependent properties in the media signal.

16. Device according to claim 13, wherein one set of signal dependent properties  
20 is chosen from a group comprising: perceptual properties, masking thresholds, quantization levels, scale factors and run-levels.

17. Device according to claim 13, wherein one properties determining unit (12) is  
25 arranged to determine a set of signal dependent properties (w) to be used for simplifying watermarking the media signal.

18. Device according to claim 13, wherein the embedding unit comprises a  
reversible watermarking unit (16) where the output signal from the embedding (x') has the  
same format as the input signal (x) before the embedding, and where the original signal (x)  
30 can be reconstructed in an at least close to bit-exact manner.

19. Device according to claim 13, wherein the embedding unit comprises a buried  
data channel providing unit (56).

20. Device according to claim 13, further comprising:  
an extracting unit (22,58) arranged to retrieve the modified media signal (x')  
from the media signal storage and extract at least one set of signal dependent properties,  
at least one signal processing unit (24,26) arranged to process said media  
5 signal using said set of signal dependent properties, and  
means for providing the processed media signal for at least one recipient.
21. Device according to claim 20, wherein the extracting unit comprises a  
reversible watermarking decoding unit (22).
- 10 22. Device according to claim 20, wherein the extracting unit comprises a buried  
data channel extracting unit (58).
23. Device according to claim 20, wherein one signal processing unit is a  
15 watermark embedding unit (24).
24. Device according to claim 20, wherein one signal processing unit is a signal  
compression unit (26).
- 20 25. Device according to claim 20, wherein the properties determining unit and  
embedding unit are set to work before a request for delivery of the media signal is received  
and the extracting unit and signal processing unit are set to work not before receiving a  
request for delivery of the media signal.
- 25 26. Device (20) for distributing a media signal comprising:  
an extracting unit arranged to retrieve a modified media signal (x') from a  
media signal storage (18), which modified media signal has been obtained by embedding at  
least one set of signal dependent properties related to the media signal in said media signal,  
and extract at least said one set of signal dependent properties,  
30 at least one signal processing unit (24,26) arranged to process said media  
signal using said set of signal dependent properties, and  
means for providing the processed media signal for at least one recipient.

27. Device according to claim 26, further comprising a media signal storage of the modified media signal (x').
28. Signal carrying modified media signal (x') as generated by any of the methods  
5 of claims 1 or 12.
29. System (29) for distributing a media signal comprising the devices of claim 13 and 26.
- 10 30. Computer program product (80) capable to implement any of the methods of claims 1 or 12.